



## **User's Guide for the NOAA Coral Reef Conservation Program MPA Checklist**

### **Purpose**

This user's guide was developed as a reference to be used with the NOAA Coral Reef Conservation Program MPA Checklist to provide further clarification on the fourteen assessment areas addressed in the checklist, and to assist assessment participants in the selection of a specific tier for each assessment area. The guide includes instructions on how to conduct assessment interviews and how to complete the checklist document. The user's guide also provides a detailed description of the intention behind each of the 14 assessment areas to help the interviewer clearly explain the significance of and differentiate between each tier in an individual assessment area. This helps to ensure that the correct tier is selected so that management capacity can be accurately assessed and all gaps and needs can be appropriately identified. Many of the assessment area descriptions also include a section entitled "helpful resources" that refers to additional information related to that assessment area that is either made available in the appendix to the user's guide or as a web link.

### **The MPA Checklist**

Evaluating the current status of marine protected area (MPA) implementation and management can lead to improved MPA effectiveness and performance. Strengthening MPA management to conserve coral reef resources remains a pillar of NOAA's Coral Reef Conservation Program (CRCP) efforts both domestically and internationally (<http://coralreef.noaa.gov/about/crcp/strategy/currentgoals/>). With its focus on conservation of coral reefs and the human communities that depend upon them, a priority goal of the CRCP is to support effective implementation and management of marine protected areas (MPAs) and ecological networks of MPAs that protect key coral reef ecosystem components and functions. This MPA Management Assessment Checklist was developed as a simple tool to assess the management of MPAs in priority coral reef sites in U.S. jurisdictions and international areas important to the CRCP and jurisdictional partners. This checklist will allow the CRCP to better understand the needs of its partners in the MPA management community and help managers build and/or maintain the management capacity necessary for successful implementation of their MPA management goals and objectives.

The information gathered for the MPAs, collected through interviews with site managers and other key staff, will provide insight into management strengths and needs. With this information, the CRCP can make more informed decisions about where to strategically invest limited resources to address priority MPA management

capacity gaps. Additionally this will provide a transparent process to the resource managers responsible for MPA management. Managers will then have the information needed to request funding, technical support, and other forms of assistance through targeted proposals to the CRCP and other funders, thereby increasing the capacity of partners in the management community to effectively conserve their coral reef resources.

This tool will also be used to track the performance of the CRCP at addressing the management needs identified using the checklist. Through initial assessments and periodic re-evaluations, the CRCP will track incremental progress made at MPA sites and identify new or emerging issues that may impede management success. The CRCP will compile and report on this progress through a NOAA performance measure - therefore, the performance of the CRCP will be tied to the overall management effectiveness of the MPAs that it strives to support.

It should also be noted and explained that this tool is NOT designed to evaluate MPA effectiveness and not assess whether or not an MPA is functioning effectively to achieve the specific goals and objectives around which the site was designed. There are several different existing tools that can be used to evaluate site effectiveness ([www.mpa.gov/nationalsystem/effectiveness/](http://www.mpa.gov/nationalsystem/effectiveness/)). In contrast, this tool assesses whether or not the core components of an MPA management program exist. Addressing programmatic gaps that are identified through this assessment process will increase the likelihood of effective site implementation.

Additionally, the results of this assessment will not be analyzed to grade sites (e.g. excellent, good, bad) based on a set of standards. While results from each site assessment can be collated to explore common capacity gaps within a jurisdiction, country or region, this tool is not designed to provide quantitative results to compare management effectiveness between multiple sites. It is intended to be applied at the individual MPA site level to reveal management capacity strengths and gaps, and to inform in-depth discussion on possible needs and planning to build capacity within the assessed site.

In summary, the NOAA CRCP MPA checklist was designed to gather information to guide NOAA CRCP activities and investments to better meet identified capacity gaps and needs of specific priority MPAs. Additionally, it was designed to allow NOAA CRCP to measure progress in building MPA management capacity at these specific sites over time with the ultimate goal of improving management effectiveness.



## Eligibility Requirements for Assessment by CRCP

In order to be eligible for assessment by NOAA's CRCP an MPA site needs to meet the following three criteria:

- **Be located in one of the priority geographic areas as identified by the CRCP**  
(Domestic priorities include: American Samoa, the Commonwealth of the Northern Mariana Islands, Guam, Hawaii, Flower Garden Banks, Florida (Martin County to the Dry Tortugas), Puerto Rico, and the U.S. Virgin Islands. International priorities include jurisdictions located in the follow four regions: the Wider Caribbean, Micronesia, Samoa and the Southwest Pacific, and the Coral Triangle.) Priority sites within U.S. jurisdictions as well as priority countries within some of our international priority regions have been identified. As such these places are a priority for CRCP support and investment. *(provide link to priority setting docs and international implementation plans on CRCP website).*

- **Be a legally established MPA**

In order to be assessed by the CRCP, the site must be recognized by appropriate government authority or under equivalent customary tenure or other form of community-based protection status.

- **Have some ongoing management activity**

In order to be assessed and to be eligible for future CRCP support, the site must be actively managed at some level. Before the CRCP will invest time and resources into a site, support for the implementation of that site, through management activity, must be demonstrated by the governing authority or local community that is responsible for the MPA. No "paper parks" will be assessed by the CRCP.

## Assessment Areas

The MPA Checklist was developed to provide a simple approach to measuring management capacity of a site against a specific set of core MPA management program components. The checklist includes fourteen assessment areas that are key components of a successful MPA management program:

1. Management planning,
2. Ecological network development,
3. Governance,
4. On-site management,
5. Enforcement,
6. Boundaries,
7. Biophysical monitoring,
8. Socioeconomic monitoring,
9. MPA effectiveness evaluation and adaptive management,
10. Stakeholder engagement,
11. Financing,
12. Outreach and education,
13. Conflict resolution mechanisms, and
14. Planning for resilience to climate change.

These specific assessment areas reflect capacities that NOAA, as well as other governmental and non-governmental organizations that provide resources for MPA initiatives, could support through grants, technical assistance, and trainings. Three tiers of management activity are defined and presented under each assessment area. The NOAA CRCP seeks to apply this assessment tool to eligible MPA sites in priority geographic areas and to improve management capacity by providing funding and technical assistance to help MPA managers progress from tier one activity towards tier two and tier three management activity in each of these fourteen assessment areas. It may neither be realistic nor appropriate to achieve tier 3 level status in all assessment areas. The NOAA CRCP has identified targets for what it considers effective conservation in each assessment area. Individual sites and programs that choose to use this tool need to identify those targets for their site or sites.

## Approach

### *Assessment Interviews*

The assessment is meant to be administered through an interview process and to collect both specific rankings under each of the 14 assessment areas as well as qualitative information for each area explaining the specific issues and situation that led to the selection of a tier. Interviewers should conduct the consultation directly with the site manager. If a site manager has not been assigned to the MPA the interview can be conducted with a knowledgeable representative from the government agency, community or non-governmental organization that has been authorized to oversee the management of the site.

If appropriate, including other site staff or local partners in the interview process, whether in a group discussion or as separate individual interviews, can enhance the quality of the assessment and provide further detail on specific issues and efforts for the site that the site manager may not be able to provide. This additional insight from staff or key site management partners can facilitate the selection of specific strategies to address a capacity gap. Although these additional discussions with staff and local partners can prove useful, the main interviewee should be someone who has a comprehensive understanding of the MPA and its management program.

If multiple agencies/organizations are involved in different aspects of managing the site, it would be important to conduct either a group interview with all of them or individual discussions with appropriate representatives from each. **No matter how many discussions and meetings are conducted to gather information on a specific site, only one checklist should be completed for each site.** If there are multiple participants in the discussion and there is a difference of opinion regarding which tier to select for an assessment area, the interviewer should try and facilitate a consensus decision around one tier. If this is not feasible, the site manager or lead agency representative for the site should make the tier selection. Depending on the number of people involved in the discussion and the level of ongoing activity within the MPA, each interview discussion can take anywhere between one and three hours to collect the desired information. This process can take several days for sites that require multiple meetings with managers, staff and partners.

In many places one agency or manager has oversight responsibility over a system of sites or multiple sites. It is very important to note, that in order to be able to understand and address capacity at the individual site level, **a separate checklist should be completed for each individual MPA.** Although the information for several sites may be gathered through a single meeting with a site manager or agency representative, it is essential that an individual assessment is completed for each site.

## *Tiered Ranking*

The checklist was designed using a tiered approach with the first tier reflecting little to no capacity in an individual assessment area and the third tier reflecting high capacity in the assessment area. While not absolute, it's likely that MPAs that are recently established or are just beginning to implement management activities will normally rank at tier one or two for most assessment areas. Additionally, MPAs that are more mature and that have been carrying out management programs for some time are more likely to rank at tier two or three.

During the assessment the interviewer should clearly define the three different tiers for each assessment area and answer any questions that the interview participant(s) may have about the significance of each tier before a selection is made. After a tier is selected, the interviewer should encourage discussion to gather in-depth understanding about why the interview participant(s) has chosen a particular tier for each assessment area and ensure that it is the most appropriate selection. The follow up question after each tier selection should be "Why did you select this tier?" and the interviewer should promote open dialogue about the site capacity and the issues and efforts that influenced the ranking decision. This is especially true for sites that are in tier one or two for a particular assessment area. For these areas it is important to document the specific challenges and needs within the site management regime and to present ideas on what may be required to reach higher tiers in that assessment area. Understanding the root causes for challenges and capacity gaps along with the identification of specific needs to address them can help resource organizations provide more strategic support to increase MPA management capacity. This data should be recorded in the "site specific comments and information" boxes that are provided for each assessment area. This information will also be useful if a reassessment interview is completed in the future, especially if the interview participants change. The selected tiers for each assessment area should also be recorded in the MPA Management Assessment Score Card that is provided at the end of the checklist document.

After completing the assessment interview, the site manager and any other staff or partners that participated in the discussions should be provided with a copy of the assessment. The site management can then work with key MPA funders and supporters such as NOAA CRCP; other government agencies at the national, state or local level; or MPA practitioners and resource partners in the NGO and academic communities to develop a management capacity building plan for their site. This plan should identify which assessment areas the site management would like to address and which tier for each of these assessment areas that they wish to reach. Once the capacity building goals are clearly defined, specific management capacity building strategies can be identified based on the specific issues and needs of the site. This plan can then be used to inform funding decisions and proposal for funding, training or technical support.

## Assessment Area Descriptions

This section provides a detailed description of the intention behind each of the 14 assessment areas to help the interviewer clearly explain the significance of and differentiate between each tier in an individual assessment area. This helps to ensure that the correct tier is selected so that management capacity can be accurately assessed and all gaps and needs can be appropriately identified.

### 1. *Management Planning*

Tier 1	Some management activity being implemented, but no management plan in place
Tier 2	Some management activity being implemented and management plan developed
Tier 3	Approved management plan that is being implemented

The management plan is often considered to be the foundation of an MPA management program as it states the mission, goals, and objectives of an MPA and identifies the specific actions that should be carried out in order to achieve these goals and objectives and therefore effectively manage the site. Having a management plan is considered one of the key components of a successful MPA management program as it can serve to guide activities in a strategic direction to achieve site goals.

The three tiers presented in this assessment area are to be used to understand the overall level of management activity in the MPA and what is guiding those activities.

In tier one, some activities (e.g. enforcement, outreach, monitoring, etc) may be occurring but they are being identified and implemented in an opportunistic manner and are not being driven by a strategic plan.

In tier two, activities are occurring and a plan has been developed, but those activities are not necessarily driven by the plan. Sites which fall under tier two in this assessment area often have had a management plan developed for them, but the plan is not actively referred to and applied. The management activities that are being implemented may have been ongoing before the plan was developed.



In tier three, a management plan exists and is being implemented. The site managers and/ or site staff or responsible community members are referring to the plan and making strategic decisions about the implementation of management activities in the site.

### HELPFUL RESOURCES:

See **Appendix 1** of this user guide for “Site Planning Guidelines” for MPA management plans from R.V. Salm, John Clark, and Erkki Siirila (2000). *Marine and Coastal Protected Areas: A guide for planners and managers*. IUCN. Washington DC. Xxi. p.41

**Appendix 2** provides information on the structure , content and characteristics of a good management plan.

## 2. Ecological Network Development

Tier 1	Site is either not associated with a network or is part of an ecological MPA network but is not designed to support network goals and management is not coordinated across the network
Tier 2	Site is part of an ecological MPA network and site is designed to support the goals of an ecological network but management is not coordinated across the network
Tier 3	Site is part of an ecological MPA network, site is designed to support the goals of an ecological network and site management coordinated with other sites across the ecological network

It is recognized that ecological network development is a relatively new concept for many regions and in most cases existing MPAs have not been established to meet ecological network goals and will therefore be at tier one. As such, tier one sites are neither designed to meet ecological network goals, nor coordinated with other sites in a network.

However it is hoped that over time and with further MPA networking support to jurisdictions, new sites will be developed based on larger networking concepts (e.g. ecological connectivity) and therefore identified as tier two or three. In both tiers two and three, sites have been designed to meet ecological network goals.

In tier two the site was designated to function as part of an ecological network of MPA sites that has system level goals and objectives, but the site is being



managed as an independent unit and is not coordinated with other sites in the system.

In tier three, the site management is coordinated with other sites in the network and management activities and programs are designed and implemented on a system wide scale.

An additional point of clarification is where “ecological network plans” have been developed after site designation. Often times these networks incorporate existing sites for ecological services they provide to the network and then new sites are planned to fill in gaps. In this case, existing sites can be at tier two or three depending on how the site is managed.

### HELPFUL RESOURCES:

A guide for developing MPA networks has been developed by the IUCN World Commission on Protected Areas, NOAA and The Nature Conservancy and is available at: <http://www.wdpa-marine.org/MPAResources/MPAPanningResources/Docs/Establishing%20resilient%20MPA%20networks-making%20it%20happen.pdf> (IUCN World Commission on Protected Areas (IUCN-WCPA) (2008). *Establishing Marine Protected Area Networks—Making It Happen*. Washington, D.C.: IUCN-WCPA, National Oceanic and Atmospheric Administration and The Nature Conservancy. 118 p.).

The Partnership for Interdisciplinary Studies of Coastal Oceans (PISCO) provides some “Rules of Thumb for MPA Network Design” at <http://www.piscoweb.org/policy/marine-protected-areas/marine-protected-area-design>

### 3. Governance

Tier 1	Site has been legally established or is under equivalent customary tenure or other form of community-based protection status, but there are few or no official or community based rules and regulations in place supporting the MPA and its management plan
Tier 2	Laws or customary instruments for the establishment of the MPA are in place, and official or community based rules or regulations governing some specific activities within the MPA are also in place
Tier 3	Clearly defined laws or customary instruments and official or community based rules and regulations governing all specific activities included in the objectives of the site management plan are in place

This assessment area aims to evaluate the regulatory framework for the site. As provided in the eligibility requirements on p.3 of this user guide, the MPA checklist is aimed at assessing legally designated sites. Therefore, tier one states that the site is legally established but DOES NOT HAVE any specific rules and regulations to support the MPA goals and objectives.

In tier two the site is legally established and there are some rules and regulations governing only SOME of the specific uses and activities targeted for management within the site. For example, users of the site might include boaters, divers, and fishers but rules might only exist to regulate fishing activity.

In tier three there are rules and regulations to govern ALL targeted uses and activities in the site. In this case, the activities in the management plan are legally backed by enforceable policies.

It is important to remember that in some cases, new rules and regulations are developed through the management planning process but might not have proper legislative backing. In this instance a legal review and revisions to relevant laws or approval of new legislation may be needed to fully support the site rules. The interviewee should discuss this with site managers to understand the enforceability of the rules and regulations of the site.

#### 4. On-site Management

Tier 1	No management personnel assigned to site and/or little or no formalized community oversight
Tier 2	Some management personnel assigned to site or some formalized community oversight
Tier 3	Full-time site manager and programmatic personnel assigned to site or local community based management leader in place that has been formally designated and accepted and is able to dedicate sufficient time to the management of the site

This assessment area evaluates the physical absence or presence of staff at the MPA site.

In tier one sites there are no specific staff or community members responsible for the oversight of the MPA.

In tier two sites there may be staff that work out of a central office and visit the site occasionally to carry out activities, but there are no “on-site staff” physically stationed at the site. Sites that have a manager who is responsible for multiple sites, and is physically located at a central office or at one of the other sites would qualify as tier two sites.

In tier three sites there is a full-time site manager who is physically stationed at the site or local community members living at a co-managed site who are able to formally carry out management activities (outreach, surveillance, monitoring, etc.)

## **5. Enforcement**

Tier 1	Few or no established rules and regulations exist or there is little or no enforcement of existing rules and regulations
Tier 2	Inconsistent enforcement of rules and regulations
Tier 3	Active and consistent enforcement of rules and regulations

The intent of this assessment area is to understand the degree of enforcement of the site rules and regulations.

In tier one sites there is an overall lack of enforcement. This may be because there are no rules and regulations governing specific activities within the MPA, or due to a lack of enforcement staff and/or resources to monitor compliance with existing rules and regulations.

The second and third tiers explore varying degrees of enforcement of the site with the only difference being that tier two has inconsistent enforcement activity (lack of regularly scheduled patrols, lack of a regular presence at the site, etc.) and tier three has deliberate and regular enforcement activity.

## 6. Boundaries

Tier 1	Lack of clearly defined boundaries and/or zones
Tier 2	Clearly defined boundaries and/or zones
Tier 3	Clearly defined boundaries and zones and information on boundary locations and permitted activities in various zones (if applicable) provided to public and MPA stakeholders

The intention of this assessment area is to understand if the geographical boundaries (e.g. through GPS points or specific land markers) have been defined and if they have been made available to public. Additionally the tiers make reference “zones”. If the site includes various zones with different allowable activities in different areas within the bigger MPA, the location and boundaries of the zones should also be clearly defined and marked for the public.

Sites in tier one do not have specific boundaries that have been defined in any way.

Sites in tier two have defined boundaries either in the legislation that established the area or in the site management plan, but they may not be easily understood by the public (i.e. there are no maps which clearly show where the boundaries are and have been made readily available to the public and there are no markers and/or signage that clearly delineate the site).

In tier three sites the boundaries are well defined and the information is readily available to the public (i.e. there are maps which clearly show where the boundaries are and these maps have been made readily available to the public; and/or there are visible markers and/or signage that clearly delineate the site).

## 7. Biophysical Assessment and Monitoring

Tier 1	Little or no existing biophysical monitoring activity
Tier 2	Existing biophysical monitoring program
Tier 3	Data produced from biophysical monitoring program being evaluated and used to inform management decisions

This assessment area seeks to evaluate the degree of bio-physical monitoring occurring at the site and how the information that results from that monitoring effort is being used.

In the first tier, the site may have had a baseline assessment of habitat, species or other biophysical resources at some point, but there are no repeated observations of the status of these resources and therefore there is no on-going monitoring occurring.

In the second tier the site has an on-going monitoring program. This could include opportunistic monitoring or a defined monitoring plan that has been developed and regular monitoring of the status and condition of the resources within the MPA.

The third tier is achieved when the results of the monitoring effort are being applied to inform management activities through adaptive management.

As part of the discussion with managers and site staff, interviewers should try to understand what specific biological information is being collected and why; and whether or not the information being collected is based on the goals and objectives of the site. This can lead to a better understanding of the capacity of the site to reach tier three status.

## 8. Socioeconomic Assessment and Monitoring

Tier 1	Little or no existing socioeconomic monitoring activity
Tier 2	Existing socioeconomic monitoring program
Tier 3	Data produced from socioeconomic monitoring program being evaluated and used to inform management decisions

Similar to the previous assessment area on biophysical monitoring, the aim of this area is to understand the degree of socio-economic monitoring occurring at the site and how the resulting information is being used.

In the first tier, the site may have had some kind of socioeconomic assessment such as an economic valuation study or social survey at some point; but there are no repeated observations of socioeconomic conditions or indicators and therefore there is no monitoring occurring.

In the second tier the site has a socioeconomic monitoring program. This entails repeated observations of identified social indicators and could be based on a socioeconomic monitoring plan that has been developed for the site. The third tier is achieved when the results of the monitoring effort are being applied to inform management activities through adaptive management.

As part of the discussion with managers and site staff, interviewers should try to understand what specific socioeconomic information is being collected, why and whether or not the information being collected is based on the goals and objectives of the site. This can lead to a better understanding of the capacity of the site to reach tier three status.

### HELPFUL RESOURCES:

“SocMon” (The Global Socioeconomic Monitoring Initiative for Coastal Management) is an initiative being implemented at the global and regional levels aimed at helping coastal, marine and MPA managers better understand and incorporate the socioeconomic context into their management programs ([www.socmon.org](http://www.socmon.org)). SocMon works through regional and local partners to facilitate community-based socioeconomic monitoring. Several regionally specific publications providing guidelines on socioeconomic monitoring for coastal managers are available at <http://www.socmon.org/publications.aspx>

## 9. Effectiveness Evaluation and Adaptive Management

Tier 1	Little or no evaluation of MPA effectiveness
Tier 2	MPA effectiveness evaluated but no ongoing effectiveness monitoring and evaluation program in place
Tier 3	MPA effectiveness evaluated and effectiveness monitoring and evaluation program in place with findings being applied to adapt management strategies

This assessment area is linked to assessment areas 7 and 8. If the site is at tier three in both of the previous questions, meaning the information being collected is directly correlated to their management plan objectives, and the data is being used to inform adaptive management strategies; then MPA effectiveness is indeed being evaluated. However, some sites may not have on-going monitoring programs but have developed programs to evaluate the site at given time periods and are using a specific tool to look at various indicators of effectiveness. It is good for the interviewer to explore how the site evaluates whether or not the MPA goals and objectives are being achieved and whether or not any specific effectiveness evaluation tools are being used.

In tier one sites there is no effort to evaluate whether or not the MPA goals and objectives are being met.

In tier two sites there is some effort to evaluate whether or not the MPA goals and objectives are being met, but this information is not being applied to inform changes in management strategies.

In tier three sites there is some effort to evaluate whether or not the MPA goals and objectives are being met, and this information is being used to inform changes in management strategies.

### HELPFUL RESOURCES:

For a list of some of the existing tools that can be used to assess MPA effectiveness see Appendix 3.

## 10. Stakeholder Engagement

Tier 1	Little or no community and stakeholder engagement in management planning
Tier 2	Community and stakeholder engagement in management planning
Tier 3	Community and stakeholder engagement in management planning and implementation of site management efforts

It is widely recognized that stakeholder engagement in MPA management processes and efforts is critical for success. As such, this question is aimed at understanding how involved local stakeholders are in the both the development of MPA management plans and the implementation of management strategies and activities. This could include activities such as community watch programs to complement enforcement efforts or community lead outreach and education activities. This question can be used to gauge the interest of managers in building stakeholder engagement programs and processes.

The first two tiers solely focus on involvement in the management planning process. This assessment area assumes that a management plan exists for the site or that a planning process is underway, as this is a starting point for stakeholder engagement as it is one of the critical steps in which stakeholders should be involved (i.e. through developing the site vision, targets, threats, objectives, actions, etc.). However, there may be cases where a plan is not in place or in development, but stakeholder engagement activities are still occurring (e.g. outreach, monitoring, etc). In this case, the interviewer should discuss the option of indicating that the site is at tier one in this assessment area, but include details about existing stakeholder activities in the comments. This could identify the need again for capacity support to develop a



management plan for the site as a first step, and to include stakeholders in the development of that plan.

In tier three stakeholders were involved in management plan development for the site and are also involved in implementing management activities.

## 11. Financing

Tier 1	Little or no reliable source of funding identified to support management activities
Tier 2	Existing funding for management activities
Tier 3	Sustainable finance plan being implemented that provides long term sustainable funding mechanisms

This assessment area is aimed at understanding the sources of funding provided for MPA management. The key word in tier one is “reliable” which means some kind of on-going financial commitment. For example, if a site has only received funds for individual projects through short term grants, then they would likely be in tier one because the funding sources are not ongoing.

The second tier states that the site does have access to on-going funding, although it might not be nearly enough to fully manage the site. Tier two would also include sites where a sustainable finance plan has been developed but is not being implement to ensure long term support for the MPA.

Finally, the third tier describes a case where there is a deliberate effort to provide sustainable financing for site management activities. These sources could include user fees, or conservation tax funds that support MPA management.

### HELPFUL RESOURCES:

“Sustainable Financing of Protected Areas: A global review of challenges and options” available at <http://data.iucn.org/dbtw-wpd/edocs/PAG-013.pdf>.

A list of various publications on conservation finance is provided by The Nature Conservancy at <http://www.parksinperil.org/resources/art18405.html#consfinance>.

## 12. Outreach and Education

Tier 1	Little or no ongoing outreach and education activities exist
Tier 2	Ongoing outreach and education activities in support of the MPA
Tier 3	Existence of an outreach and education program with various activities and strategies focused on the MPA that helps achieve the MPA's goals and objectives

This assessment area is intended to draw out information on the amount and type of outreach and education activities that occur at the site. The first tier explains that no (or little) ongoing outreach and education activities occur. This may mean that there have been some outreach events that have occurred but that these were one-time events and no ongoing activities exist, or that the site is used by the management agency for public events related to their mission and programs but that these events are not targeted at achieving specific goals and objectives for that site.

The second and third tiers describe a situation where there are continual outreach and education activities that directly support the MPA. This means that the outreach and education occurring at the site or for the site is not a general outreach activity carried out by the management agency but is specific to supporting the MPA goals. The difference between tiers two and three is that tier two level sites may have ongoing activities but they are not necessarily designed as a program. Tier three level sites have outreach and education programs with defined target audiences, messages and strategies. For example, a tier three MPA might include an outreach strategy that provides users such as fishermen with ecological information that helps them understand the purpose of the site, or outreach to boaters on mooring protocols.

## 13. Conflict resolution mechanism

Tier 1	Little or no existing mechanism to resolve conflict with MPA stakeholders
Tier 2	Mechanism for conflict resolution with MPA stakeholders is available but is not being used and stakeholders are not aware of this mechanism
Tier 3	Mechanism for conflict resolution is available and MPA stakeholders are aware of and use this mechanism

Conflicts with stakeholders and MPA resource users arise in even the most capable MPAs. The existence of a specific mechanism by which to resolve these potential

conflicts provides a transparent process for the public, increasing the credibility of the MPA management program. It also promotes efficient resolution of conflicting issues. MPAs in tier one for this assessment area have no established process or mechanism by which to resolve conflict in a consistent manner.

Tier two MPAs may have made the effort to define a process or mechanism for conflict resolution in their management plan or as a part of their management program, but the process is not applied consistently when conflict situations arise, or MPA users and stakeholders are not aware of the established mechanism.

Tier three MPAs have an established process or mechanism for conflict resolution that is consistently applied to resolve conflict situations AND most MPA users and stakeholders are well aware of the mechanism and how to utilize it.

#### ***14. Planning for resilience to climate change***

Tier 1	Little or no consideration of climate change resilience in the management of the MPA.
Tier 2	Management includes actions intended to increase the resilience of coral reef resources to the effects of climate change
Tier 3	Site is designed to increase resilience of coral reef resources to the effects of climate change and management includes actions necessary to avoid or minimize impacts and spread the risk due to climate change

Like ecological networking, climate change resilience principles (see appendix 4) are a relatively new concept and therefore many sites were not designed to include them. However, as more and more managers become familiar with these concepts, it is desired that new MPAs will be designed and/or existing sites will be revised to include some of these principles. Specifically, these principles within the site could include zoning or specific protections for reef areas that have shown resilience to past bleaching events, protections of representative habitats within the site (e.g. reef, seagrass, mangrove), coordination with land based management to reduce or minimize land based sources of pollution, or protection of critical coastal land areas to allow for migration of species and habitats such as mangroves with sea level rise.

Tier one sites under this assessment area have little to no consideration for these principles in their management plans and management programs. These may be older sites that were established before the concept of resilience was introduced to the MPA and coral reef management communities and for which no effort has been made to update management plans or activities based on this concept.



Tier two sites were not deliberately designed and located in order to build the resilience of coral reef ecosystems to the impacts of climate change but the management plans and programs for these sites include actions that are intended to support resilient reef resources. These may also be older sites that were established before the concept of resilience was introduced to the MPA and coral reef management communities, but in these sites intentional effort has been made to update management plans or activities based on this concept.

Tier three sites are much rarer and are sites that have been established, designed and are managed with the specific intent of building coral reef ecosystem resilience. These are most likely MPAs that have been more recently established but may also include older sites that have been redesigned or rezoned with the specific intent of building coral reef ecosystem resilience.

### HELPFUL RESOURCES:

**Appendix 4** provides a list of principles for incorporating resilience to climate change in the design and management of marine protected areas.

More information on reef resilience as well as a toolkit that provides coral reef managers with guidance on building resilience to climate change into the design of MPAs and daily management activities is available at <http://www.reefresilience.org/>

## APPENDICES

### APPENDIX 1 : Site Planning Guidelines

R.V. Salm, John Clark, and Erkki Siirila (2000). *Marine and Coastal Protected Areas: A guide for planners and managers*. IUCN. Washington DC. Xxi. p.41

1. The strategy document identifies steps to establish a protected area and forms the foundation for the Management Plan. It is the preliminary document by which approvals are gained and designation of an MPA site is formalized. The strategy document is thus an important part of the management process.
2. The Management Plan for the site is the operational guide for the MPA and identifies actions to resolve specific management issues. It is thus a guiding tool for management.
3. The principal goal of the Management Plan is generally to maintain the natural resource values (seascapes, species habitats, ecological processes) of an area, and to ensure that all uses are compatible with that aim.
4. The Management Plan should aim to conserve natural values, optimize economic uses, and integrate traditional uses. Through zoning, it should attempt to separate incompatible activities, ensuring that particular uses are permitted only in suitable areas and sustainable levels of use are specified.
5. The Management Plan derives directly from management issues and their related objectives and activities. It needs to encompass legal and administrative concerns and educational and social objectives along with ecological and physical ones.
6. The Management Plan should function to achieve interagency coordination and cooperation among stakeholders (management authority, concerned departments of government, neighboring communities and other user groups) and to facilitate communication between MPA administration and management.
7. Initiation of site management need not be delayed until a MPA plan is completed. In countries where lengthy bureaucratic procedures or other factors delay the completion of the plan, an interim management document (operational plan) can be formulated and implemented.
8. Management plans may be required to function as interpretive documents, being designed for the public as well as for management. Planning workshops should be conducted to garner interest from the nearby community as well as certain sectors of the public.
9. Planning should examine the effects that MPAs have on local people and find ways to avoid negative effects or compensate for these. Public consultation is important both to identify current uses and to avoid conflict with local traditions and to encourage participation in planning.

## APPENDIX 2 : CONTENTS OF A GOOD MPA MANAGEMENT PLAN

*Developed by NOAA CRCP and the Pacific Islands MPA Management Community (PIMPAC)*

1. **TITLE PAGE** – name of site; names of lead group(s); date; version
2. **EXECUTIVE SUMMARY** – key issues and decisions; summary aims, approach, and actions
3. **TABLE OF CONTENTS**
4. **INTRODUCTION** – Define purpose and scope of the plan; explain legislative basis and authority for the plan’s development; summary timeline of plan development;
5. **SITE DESCRIPTION:**

*(a.) Location and Governance:*

- Location and size of the area
- What is the purpose of the area? (why was it created)
- What is the legal status of the area?
- Who has the legal authority to manage the area?
- What is the current management system?

*(b.) Biophysical Setting:*

- What are the key Physical features of the area (climate, geology, geomorphology, hydrology, soil characteristics)
- What are its key biological features of the area? (communities, flora and fauna, including any outstanding natural resource features) What are the Historical features of the area?
- What are the natural resource targets for conservation (the ecosystems, habitats, populations and species that are the target of MPA conservation efforts) for the area?

*(c.) Socioeconomic and Cultural Setting;*

- What are its cultural features? (traditional communities, cultural features and practices)
- What are the Socio-economic features of the area? (occupancy, access, income, tenure, other basic data and trends among local communities and their dependence on protected areas).
- What are the stakeholder groups with an interest in the area?
- What are the socioeconomic and cultural targets for the area?

(d.) *Conservation Status;*

- What are the current uses of the area?
- What are the threats to the area?
- What are the obstacles to effective management
- What are the management successes in the area?
- What are the current management challenges to the area?
- What is the history of management planning in the area?
- Why has a decision been made to complete this Management Plan?

**6. THE MANAGEMENT APPROACH**

- (a.) Description of the Management Planning Process that was Used to Develop the Document
- (b.) Vision and Mission Statement
- (c.) Analysis of Strengths, Weaknesses, Opportunities and Threats
- (d.) Goal and Objectives
- (e.) Management Activities
- (f.) Zoning and Regulations

**7. OPTIONAL SECTIONS**

- (g.) Enforcement Approach
- (h.) Biological and Socioeconomic Monitoring Approach
- (i.) Roles and Responsibilities of Partners
- (j.) Administration
- (k.) Financing
- (l.) Sustainability

**8. APPENDICES (Suggested)**

- Boundaries
- Maps (see list below)
- Habitat classifications
- Plant species (flora)
- Animal species (fauna)
- Special features at the site
- Legal language/regulation (actual)



- Map 1 - Location
- Map 2 - Land/water tenure and jurisdiction
- Map 3 - Land topography and seabed bathymetry
- Map 4 - Geology
- Map 5/6 - Dominant plant and animal communities
- Map 7/8 - Major commercial and non-commercial uses
- Map 9 - Major use conflicts and threatened resources
- Map 10 - Zoning

In general a Good Management Plan has the following characteristics:

1. **Clear:** easy to read, jargon free and well presented.
2. **Concise and comprehensive:** no longer than is absolutely necessary, but with enough information to fulfill its functions.
3. **Accurate:** without major errors or statements likely to date? and with the reasons for all judgments clearly explained.
4. **Logical:** With management policies derived from an assessment of the site and with a clear rationale given for all proposals (e.g. based on best scientific information available).
5. **Acceptable:** to all those with interests in and emotional attachment to the site.
6. **Practical:** with clear objectives, realistic methods for achieving them, resulting in desired outcomes which can be monitored.
7. **Focused:** fulfilling its purpose as a tool for site management, meeting the needs of its users and satisfying any legal or other obligations.

### APPENDIX 3 : MPA Effectiveness Evaluation Tools

“How Is Your MPA Doing?” a guidebook of natural and social indicators for evaluating MPA management effectiveness (IUCN, NOAA, WWF.

<http://www.mpa.gov/pdf/national-system/mpadoing.pdf>

WWF’s Rapid Assessment and prioritization of protected area management (RAPPAM)

<http://assets.panda.org/downloads/rappam.pdf>

Score Card to Assess Progress in Achieving Management Effectiveness Goals for Marine Protected Areas (WWF and World Bank)

[http://siteresources.worldbank.org/EXTBIODIVERSITY/Resources/MPA\\_tool.pdf](http://siteresources.worldbank.org/EXTBIODIVERSITY/Resources/MPA_tool.pdf)

World Commission on Protected Areas has provided a list of “Protected Areas Management Effectiveness Methodologies” at <http://www.wdpa.org/ME/tools.aspx>

## APPENDIX 4: Resilience Principles

The Nature Conservancy

[http://reefresilience.org/Toolkit\\_Coral/C1co\\_Principles.html](http://reefresilience.org/Toolkit_Coral/C1co_Principles.html)

**Ecosystem resilience** refers to the ability of an ecosystem to maintain key functions and processes in the face of stresses, or pressures, by either resisting or adapting to change.

**Principle 1: Representation and Replication** (and risk-spreading) can help increase likelihood of reef survival. By ensuring that resilient species and habitats are well represented and replicated throughout an MPA network, coral reef managers can decrease risk of catastrophic events, like bleaching, from destroying entire reef ecosystems.

**Principle 2: Critical Areas** are vital to survival and sustainability of marine habitats. These areas may provide secure and essential sources of larvae to enhance replenishment and recovery of reefs damaged by bleaching, hurricanes or other events. They also include high-priority conservation targets, such as fish spawning aggregations and nursery habitats.

**Principle 3: Connectivity** influences the design of marine protected area networks. Preserving connectivity among reefs and their associated habitats ensures replenishment of coral communities and fish stocks from nearby healthy reefs, and may enhance recovery.

**Principle 4: Effective Management** is essential to meeting goals and objectives of an MPA, and ultimately keeping reefs vibrant and healthy. Reducing threats is the foundation for successful conservation and the core of our resilience-based strategies. Measuring effective management provides the foundation for adaptive management. Investments in human capacity and long-term financing are also crucial to sustaining effective management for the future.